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# MORE BEANS FOR WAR

THROUGH CONSERVATION FAIRMING METHODS:



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United States Department of Agriculture Soil Conservation Service Southwest Region

# MORE BEANS FOR WAR Through Conservation Farming Methods

Back of every smashing blow against the enemy on every world-wide battle front, good nourishing food is a foremost weapon of war to supply our American and Allied soldiers with the driving power they need for victory.

Among the vital foods that our armed forces must have in ever-increasing quantities to speed their victorious march, dried beans must be relied upon to do some of our heaviest food-fighting duty.

Dried beans are high in energy value. They are easily shipped and safely stored. Thousands of tons of beans are going to our fighting men and to our Allies. Beans, no less than bullets, are helping to win the battle for freedom.

## Can Help Win Battles

Bean growers who meet the call for greater production of this vital war crop may therefore feel the satisfaction of having a direct part in every inch of ground gained by our fighting forces.

At the same time, this increased production must be heavily counted upon also to supply the driving power needed by our civilian workers to make the guns and tanks and ships that our fighting men must have.

But bean growing usually involves a critical erosion hazard, unless proper precautions are taken.

How can this increased production of beans be obtained most assuredly, most profitably and most safely—keeping our land in condition to meet heavy demands for production for as long as the war may last, and then leaving fields in productive condition for peacetime needs?

## Conservation Methods Vital

On the basis of practical experience—gained at bitter cost during the last war when unsuited land was plowed up and fields were recklessly pressed to the limit—much of the answer lies in following conservation farming methods.

Fortunately, we since have learned that our present production goals can best be reached—and more safely reached—without violating good farming methods and setting off a destructive cycle of defeat at home through erosion. In other words, by careful farming we can still meet our patriotic obligations without creating any new "Dust Bowls."

Bean farmers of the Intermountain country now know that conservation practices will insure larger yields and at the same time hold the topsoil. A seven-year study made in the Estancia Valley of New Mexico, for example, showed that terraced land farmed on a contour produced 84 pounds of beans more per acre than unterraced land. Individual farmers report that conservation farming has boosted their per-acre yields from 25 to 300 percent!

# Good Start Already Made

Exact figures are lacking to show how many additional pounds of beans have already been produced for war through the use of soil and moisture conservation methods, but the figure must certainly run into the millions of pounds. This is for the reason that many more producers are now following conservation practices, and only one field is now blowing to every ten fields that were losing topsoil through wind erosion a few years ago.

Listed herewith are some of the practices that farmers have found to be of great value in obtaining top production and in maintaining their land against destruction by erosion. For the most part, these practices can be applied very easily, with only a minimum of technical help, and at little expense. Payments are available from the AAA, in most cases, to help defray the cost of putting such practices on the land.

### Easily Applied Measures

- 1. Contour cultivation—Plowing across the slope, instead of up and down hill. "Crooked-row" farming takes a little more time and energy, but gets results. Contouring retards runoff of water, keeps soil from washing away.
- 2. Terracing—Terraces should be installed on land having a slope of 1 percent or greater. Valuable for moisture conservation and erosion control, terraces also provide excellent guide lines for contour cultivation.
- 3. <u>Diversion ditches</u>—Diversions at the head of the field are frequently used with terraces to direct runoff of floodwaters.
- 4. Blank listing—Blank listing of alternate furrows in fall of year. Blank listing again in spring, if land begins to blow. Blank listing is extremely valuable for wind erosion control.
- 5. Strip cropping—Planting alternate strips of beans and other crops on the contour, such as corn and grain sorghums, breaks sweep of the wind and lessens soil loss.
- 6. Chiseling—Chiseling is sometimes recommended to obtain increased moisture penetration. This practice is more effective on heavy soils than on light-textured soils.

- 7. Leaving stubble and crop residues—Stubble provides a partial cover that helps to anchor the soil. Crop residues of all kinds lessen wind damage.
- 8. Crop rotations—Rotating beans with corn, sorghums, small grains, or other adapted crops will improve soil conditions, furnish feed for the farm livestock and make strip cropping feasible for the farm.

### Put Moisture to Good Use

In the semi-arid Southwest, bean farmers must conserve every vital drop of moisture to make a paying crop. Also, they must protect their land against the ravages of wind and water erosion if their farms are to remain productive during the years to come.

Experience of past years proves that sod land should not be broken in areas having less than 15 inches of rainfall annually. During years of abnormally high rainfall, this land might produce crops, but always in the future there is a day of reckoning—a day when soil begins to move before strong spring winds—a day when farmers, unable to continue the struggle, will abandon the land.

During this year—this critical year of 1943—farmers will have to work early and late to meet their food goals. But they will be rewarded for their labors. They will be rewarded not only with fair prices but with the knowledge that they are producing beans to defeat Hitler, Musolini, and Hirohito.

## Assistance Offered

Farmers who wish technical advice concerning their bean-growing problems should consult their county agent, AAA committee, soil conservation district supervisors, or technical workers of the Soil Conservation Service. These men are ready and anxious to help.

Conservation farming means increased yields and increased land protection. Conservation farming is a wartime necessity!

# CONSERVATION IN WARTINE

(Extract from Secretary of Agriculture Wickard's annual report)

There are six vitally important ways in which conservation on the farms and ranches of America is shortening the road to victory. They are:

- 1. Increase of yields from cropland, pasture, forest, and range.
- 2. Allocation of every acre of land to the production job that suits it best.
- 3. Elimination of waste in soil, water, fertilizer, seed, and other elements of productive capacity.
- 4. Increase of the arable area—by the control of erosion, by drainage, by irrigation, or by other proved conservation practices.
- 5% Assurance that crops will be produced in spite of drouth, rainstorms, wind, and snow to the extent that it is possible to protect crops from bad weather.
- 6. Assurance that the agricultural plant will not break down—that it will be able to produce at top speed, year in and year out, as long as the war lasts.